### REASON

• The AAR list program used with TWGSS/PGS provides a tool to evaluate gunnery and force-on-force training exercises. To be able to extract information required to conduct an AAR, the instructor must be able to prepare the AAR and operate the AAR list program.

### TRAINING OBJECTIVE

- In a classroom environment, given a TDRS computer unit, student handout, and TM 9-6920-711-12&P-1, you will perform the following:
  - · Operate AAR list controls and indicators.
  - · Set up an AAR list screen.
  - · Prepare an AAR.
  - Download and store AAR data.
  - Download AAR data to EXCEL.
  - · Perform AAR for tracking training exercise.

### **AAR CAPABILITIES**

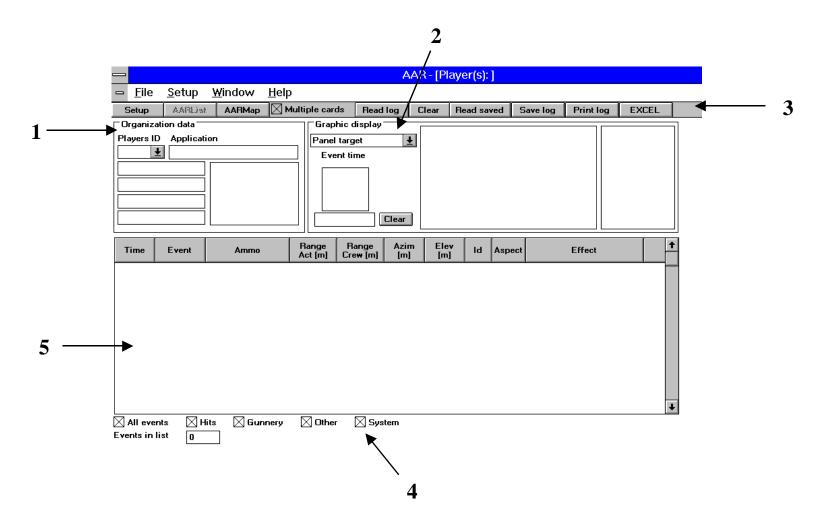
#### AAR List

Evaluates and presents detailed information of each event during the training exercise.

### AAR Map

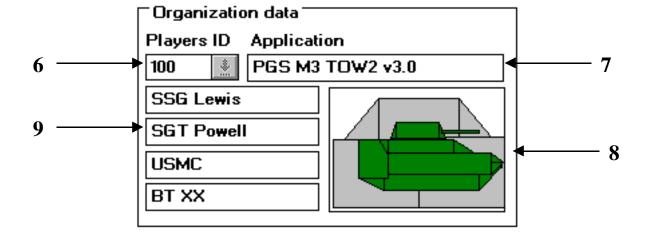
Includes the maneuver aspect of the training exercise into the AAR.

## **AAR LIST MAIN MENU**

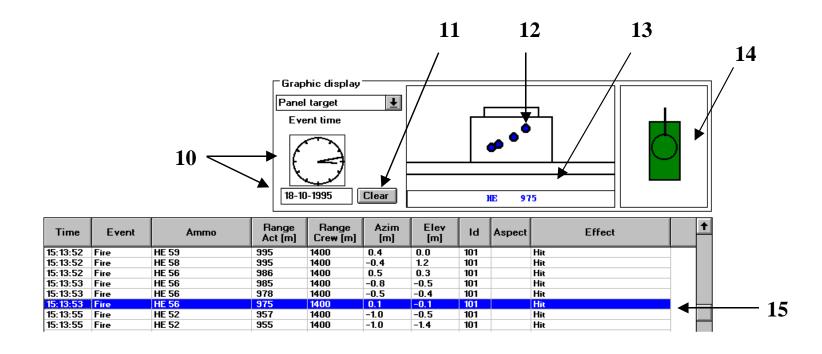


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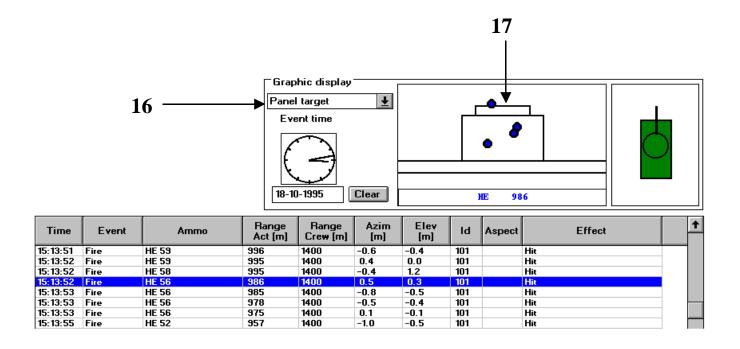
# **ORGANIZATIONAL DATA**



## **GRAPHIC DISPLAY**



## PANEL GUNNERY RESULT PRESENTATION



### PANEL TARGET SILHOUETTES

<u>Ammunition</u> <u>Silhouette</u>

**105/120 mm SABOT T80 front** 

**105/120 mm HEAT T80 front** 

TOW/TOW2 T80 front

25 mm AP BMP front

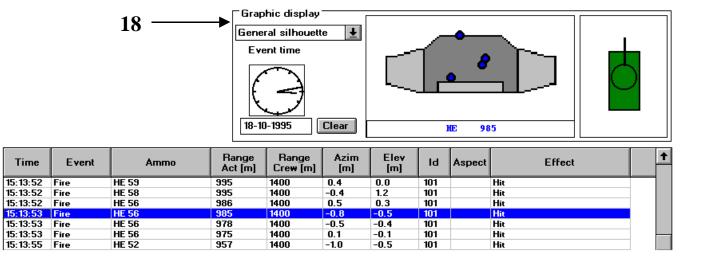
25 mm HE BMP front with ground

plane

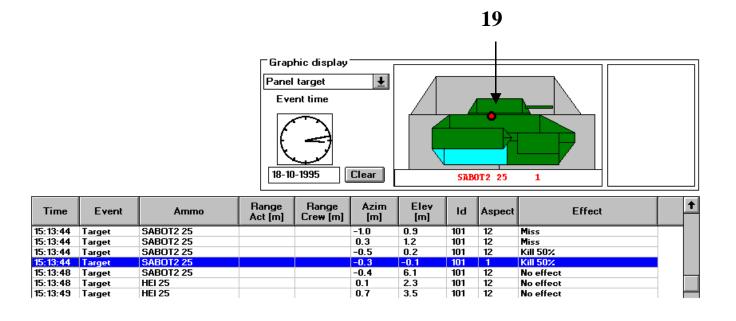
7.62 Troop target (kneeling

soldier)

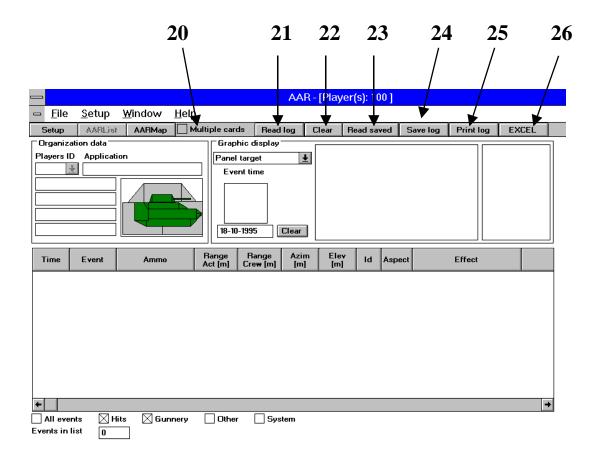
## **COMBAT MODE RESULT PRESENTATION**



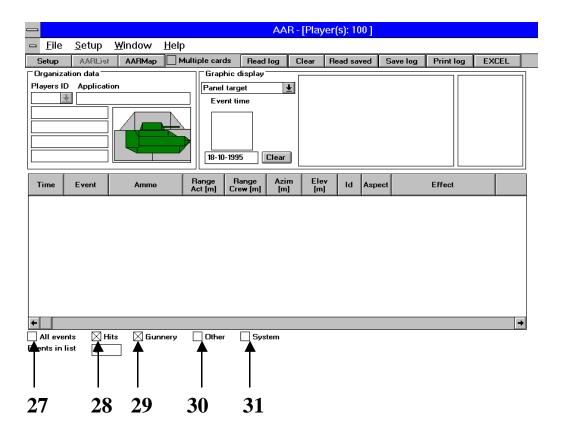
# TARGET RESULT PRESENTATION



## **AAR LIST COMMAND BUTTONS**



# LIST CONTROL CHECKBOXES



### HITS CHECKBOX

These events are displayed when only HITS checkbox is selected:

- Impact of rounds fired by TWGSS-/PGS-equipped firing systems
- Impact of rounds fired by MILES-equipped firing systems
- Control gun activities
- Autoactivation of target system events (panel gunnery only)
- Tamper indications (combat mode only)

### **GUNNERY CHECKBOX**

These events are displayed when only GUNNERY checkbox is selected:

- Firing events
- · Reload of turret and hull by controller
- · Upload of ammunition by crew
- · Tracking training events

### **OTHER CHECKBOX**

These events are displayed when only OTHER checkbox is selected:

- · LRF
- · Laser alignment
- · Power ON

### SYSTEM CHECKBOX

These events are displayed when only SYSTEM checkbox is selected:

- ERROR messages
- · NO CONNECTION messages
- ERROR CLEARED messages
- · BIT messages

# **LOG DATA MENU**

# **EXAMPLES OF EVENTS**

- FIRE
- TARGET
- CGUN
- UPLOAD
- RELOAD
- LRF
- BIT

### **105 MM AMMUNITION**

• SABOT 105 1 0 - 1000 m

• SABOT 105 2 1000 - 2000 m

• SABOT 105 3 2000 - 3000 m

• SABOT 105 4 3000 - 4000 m

• HEAT 0 - 4000 m

### 120 MM AMMUNITION

• SABOT 120 1 0 - 1000 m

• SABOT 120 2 1000 - 2000 m

• SABOT 120 3 2000 - 3000 m

• SABOT 120 4 3000 - 4000 m

• HEAT 0 - 4000 m

Note. 120 mm ammunition is programmed for higher kill probability than 105 mm ammunition.

## 25 MM AMMUNITION

• SABOT 25 1 0 - 1000 m

• SABOT 25 2 1000 - 1700 m

• HE 0 - 3000 m

# **COAX AMMUNITION**

• 7.62 0- 900 m

# **TOW MISSILE**

TOW BASIC

0 - 3000 m

• TOW 2

0 - 3750 m

### MILES EVENTS PRESENTED

• All ammunition defined within the MILES family of simulators are registered by TWGSS/PGS and presented during the AAR.

Note. See student handout for detailed information.

# **LOG DATA MENU**

Select log data						
AAR LIST COLUMNS Date Time Event Ammo Azimuth Elevation ID Aspect Effect Movement Range crew CANT	EVENTS IN LIST  Gunnery  Hits  Other  System  COLORS  Gunnary events  Hit events  Other events  System events  Warning events	EXCEL COLUMNS Date Time Event Ammo Range actual Azimuth Elevation ID Aspect Effect Movement Range crew CANT	OK Cancel			
MILANI.		CANI				

### **AZIMUTH/ELEVATION RESULT**

- Measurement presented in meters with 0.1 m resolution
- Azimuth result
  - R = + = Right
  - L = = Left
- Elevation result
  - U = + = Up
  - D = = Down

Note. 0.0, 0.0 is the defined center of mass of the target.

# **LOG DATA MENU**

## FIRE RESULTS

- HIT
- GROUND HIT
- MAX RANGE
- MISSILE STALLED
- MISSILE ABORTED

# TARGET RESULTS

- HIT
- MOBILITY KILL
- WEAPON KILL
- KILL
- MISS

# **LOG DATA MENU**

Select log data						
AAR LIST COLUMNS Date Time Event Ammo Azimuth Elevation ID Aspect Effect Movement Range crew CANT	EVENTS IN LIST  Gunnery  Hits  Other  System  COLORS  Gunnary events  Hit events  Other events  System events  Warning events	EXCEL COLUMNS Date Time Event Ammo Range actual Azimuth Elevation ID Aspect Effect Movement Range crew CANT	OK Cancel			
MILANI.		CANI				

### **AAR PREPARATIONS**

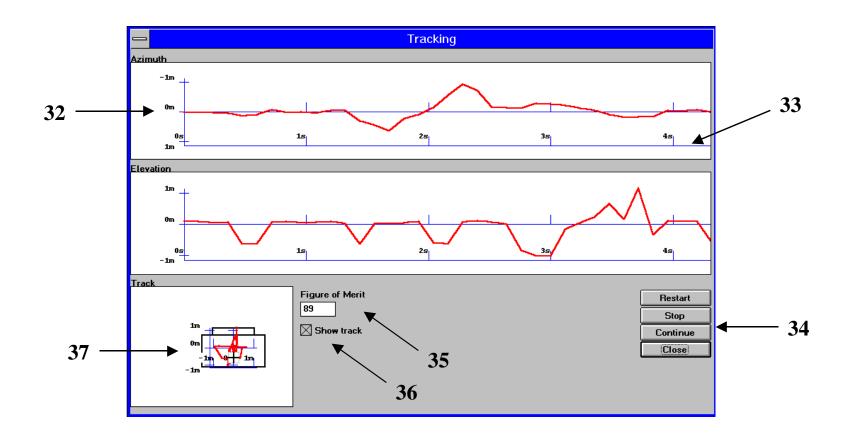
- Select columns required for AAR.
- Select events to be displayed.
- Select data to be transferred to EXCEL.
- Adjust color of events for better visibility.

# TARGET TRACKING

Time	Event	Ammo	Range Act [m]	Range Crew [m]	Azim [m]	Elev [m]	ld	Aspect	
	New date								Date: 15-02
00:00:00	New mode								Panel Gunn
13:00:12	Target								Autoactiva
13:02:23	Target								Autoactiva
13:03:43	Tracking 🔻								
13:03:52	Fire	AP 17	646	0	0.4	-1.6	1		Ground hit
13:05:28	Tracking								
13:05:37	Fire	AP 16	646	0	0.1	-0.5	1		Hit
13:06:27	Tracking								
13:06:32	Fire	AP 15	646	0	1.8	0.1	1		Ground hit
13:07:25	Tracking								
13:07:31	Fire	AP 14	646	0	0.2	-1.8	1		Ground hit

**Double click on Tracking** 

# TARGET TRACKING MENU



### **SUMMARY**

- AAR List controls and indicators
- Set up of AAR List screen
- Preparation for AAR
- Downloading and storage of AAR data
- Downloading of AAR data to EXCEL
- AAR for tracking training exercise

# **CLOSING STATEMENT**

• This block of instruction has prepared you to properly use the AAR List portion of the AAR software.